STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION





AVERY T. DAY
ACTING COMMISSIONER

City of Westbrook – Westbrook Community Center Cumberland County Westbrook, Maine A-158-71-F-N/A

Departmental
Findings of Fact and Order
Air Emission License
After-the-Fact Renewal and
Amendment

FINDINGS OF FACT

After review of the air emission license renewal and amendment application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 Maine Revised Statutes Annotated (M.R.S.A.), §344 and §590, the Maine Department of Environmental Protection (Department) finds the following facts:

I. REGISTRATION

A. Introduction

The Air Emission License for City of Westbrook – Westbrook Community Center (WCC) expired on April 5, 2011. WCC has applied to renew their expired license permitting the operation of emission sources associated with their community center.

WCC has also requested to add natural gas as a fuel for Boiler #1.

The equipment addressed in this license is located at 426 Bridge Street, Westbrook, Maine.

B. Emission Equipment

The following equipment is addressed in this air emission license:

Boilers

Equipment	<u>Unit ID</u>	Maximum Capacity (MMBtu/hr)	Maximum Firing Rate	Fuel Type, % sulfur	Date of Manuf.	Stack #
Boiler #1	MEH2415	10.5	10,194 scf/hr 75 gal/hr	natural gas, negl. distillate fuel, 0.5%	1974	1
Boiler #2	MEH2414	10.5	75 gal/hr	distillate fuel, 0.5%	1974	1

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C. Definitions

<u>Distillate Fuel</u> means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396, diesel fuel oil numbers 1 or 2, as defined in ASTM D975, kerosene, as defined in ASTM D3699, biodiesel as defined in ASTM D6751, or biodiesel blends as defined in ASTM D7467.

D. Application Classification

The modification of a minor source is considered a major or minor modification based on whether or not expected emission increases exceed the "Significant Emission" levels as defined in the Department's *Definitions Regulation*, 06-096 CMR 100 (as amended). The emission increases are determined by subtracting the current licensed annual emissions preceding the modification from the maximum future licensed annual emissions, as follows:

<u>Pollutant</u>	Current License (TPY)	Future License (TPY)	Net Change (TPY)	Significant Emission Levels
PM	0.7	0.7	-	100
PM ₁₀	0.7	0.7	-	100
SO_2	3.0	4.2	+1.2	100
NO _x	2.5	1.2	-1.3	100
CO	0.3	0.9	+0.6	100
VOC	0.1	0.1	-	50
CO ₂ e	<100,000	<100,000	-	100,000

This amendment will not increase emissions of any pollutant above the significant emission levels, therefore this application is determined to be a renewal with a minor modification and has been processed as such. The Department has determined that the facility is a minor source and the application has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 CMR 115 (as amended). WCC is incapable of exceeding the major source thresholds for criteria pollutants and is considered a natural minor. WCC is incapable of exceeding the major source thresholds for hazardous air pollutants (HAP) and is considered an area source of HAP.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license, the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as

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defined in *Definitions Regulation*, 06-096 CMR 100 (as amended). Separate control requirement categories exist for new and existing equipment.

BPT for an after-the-fact renewal and amendment requires an analysis similar to a Best Available Control Technology (BACT) analysis per 06-096 CMR 115 (as amended).

B. Boilers #1 and #2

WCC operates Boilers #1 and #2 for steam and heat. Boilers #1 and #2 are both rated at 10.5 MMBtu/hr. Boiler #1 is licensed to fire natural gas and distillate fuel and Boiler #2 is licensed to fire distillate fuel. Boilers #1 and #2 were both installed in 1974 and exhaust through a common stack.

1. BACT Findings

The BACT emission limits for Boiler #1 when firing natural gas were based on the following:

PM/PM₁₀ - 0.05 lb/MMBtu based on 06-096 CMR 115, BACT SO₂ - 0.6 lb/MMscf based on AP-42, Table 1.4-2, dated 7/98 NO_x - 100 lb/MMscf based on AP-42, Table 1.4-1, dated 7/98 CO - 84 lb/MMscf based on AP-42, Table 1.4-1, dated 7/98 VOC - 5.5 lb/MMscf based on AP-42, Table 1.4-2, dated 7/98 Opacity - 10% based on 06-096 CMR 115, BACT

The BACT emission limits for Boiler #1 and Boiler #2 when firing distillate fuel were based on the following:

PM/PM₁₀ – 0.08 lb/MMBtu based on 06-096 CMR 115, BACT
SO₂ – based on firing distillate fuel with a maximum sulfur content of 0.5% by weight
NO_x – 20 lb/1000 gal based on AP-42, Table 1.3-1, dated 5/10
CO – 5 lb/1000 gal based on AP-42, Table 1.3-1, dated 5/10
VOC – 0.34 lb/1000 gal based on AP-42, Table 1.3-3, dated 5/10
Opacity – 10% based on 06-096 CMR 115, BACT

The BACT emission limits for Boilers #1 and #2 are the following:

<u>Unit</u>	Pollutant	lb/MMBtu
Boiler #1 (natural gas)	PM	0.05
Boiler #1 (distillate fuel)	PM	0.08
Boiler #2 (distillate fuel)	PM	0.08

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Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #1 (natural gas)	0.53	0.53	0.01	1.02	0.86	0.06
Boiler #1 (distillate fuel)	0.84	0.84	5.29	1.50	0.38	0.02
Poilor #2 (distillate fuel)	0.94	0.84	5.20	1.50	0.38	0.02

Visible emissions from Boilers #1 and #2 shall not exceed 10% opacity on a 6-minute block average, except for no more than one (1) six (6) minute block average in a 3-hour period.

WCC shall be limited to a heat input limit of 16,800 MMBtu/year for Boilers #1 and #2 combined. Fuel use shall be converted to MMBtu on a monthly and calendar year total basis using heating values of 0.00103 MMBtu/scf for natural gas and 0.14 MMBtu/gallon for distillate fuel.

Fuel Sulfur Content Requirements

Boilers #1 and #2 are currently licensed to fire distillate fuel with a maximum sulfur content of 0.35% by weight. Per 38 M.R.S.A. §603-A(2)(A)(3), as of July 1, 2018, no person shall import, distribute, or offer for sale any distillate fuel with a sulfur content greater than 0.0015% by weight (15 ppm). Therefore, beginning July 1, 2018, the distillate fuel purchased or otherwise obtained for use in Boilers #1 and #2 shall not exceed a sulfur content of 0.0015% by weight (15 ppm).

2. Periodic Monitoring

Periodic monitoring for Boilers #1 and #2 shall include recordkeeping to document fuel use both on a monthly and calendar year total basis. Documentation shall include the type of fuel used and sulfur content of the fuel, if applicable.

3. 40 CFR Part 60, Subpart Dc

Due to the year of manufacture, Boilers #1 and #2 are not subject to the New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, for units greater than 10 MMBtu/hr manufactured after June 9, 1989.

4. 40 CFR Part 63, Subpart JJJJJJ

Boiler #1 is not subject to the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

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(40 CFR Part 63, Subpart JJJJJJ). Boiler #1 is considered an existing gas-fired boiler rated more than 10 MMBtu/hr.

Boiler #2 is subject to the *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources* (40 CFR Part 63, Subpart JJJJJJ). Boiler #2 is considered an existing oil boiler rated more than 10 MMBtu/hr.

Gas-fired boilers are exempt from 40 CFR Part 63, Subpart JJJJJ. However, boilers which fire fuel oil are not. A "gas-fired boiler" is defined as any boiler that burns gaseous fuels not combined with any solid fuels and burns liquid fuel only during periods of gas curtailment, gas supply interruption, startups, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year. [40 CFR Part 63.11237]

Any boiler designed to burn fuels besides gaseous fuels prior to June 4, 2010 will be considered an existing boiler under this rule. A boiler which currently fires gaseous fuels, but converts back to firing another fuel (such as distillate fuel) in the future would become subject as an existing boiler at the time it is converted back to oil.

A summary of the currently applicable federal 40 CFR Part 63, Subpart JJJJJJ requirements is listed below. At this time, the Department has not taken delegation of this area source MACT (Maximum Achievable Control Technology) rule promulgated by EPA, however WCC is still subject to the requirements. Notification forms and additional rule information can be found on the following website: http://www.epa.gov/ttn/atw/boiler/boilerpg.html.

- a. Compliance Dates, Notifications, and Work Practice Requirements
 - (1) Initial Notification of Compliance

An Initial Notification should have been submitted to EPA no later than January 20, 2014. [40 CFR Part 63.11225(a)(2)]

- (2) Boiler Tune-Up Program
 - (i) A boiler tune-up program shall be implemented. [40 CFR Part 63.11223]

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(ii) Each tune-up shall be conducted at a frequency specified by the rule and based on the size, age, and operations of the boiler. See chart below:

Boiler Category	Tune-Up Frequency
New or Existing Oil, Biomass and Coal fired boilers that are not designated as "Boilers with	
less frequent tune up requirements" listed below	Every 2 years

[40 CFR Part 63.11223(a) and Table 2]

- (iii)The boiler tune-up program, conducted to demonstrate continuous compliance, shall be performed as specified below:
 - 1. As applicable, inspect the burner, and clean or replace any component of the burner as necessary. Delay of the burner inspection until the next scheduled shutdown is permitted; not to exceed 36 months from the previous inspection for boilers greater than 5 MMBtu/hr or 72 months from the previous inspection for oil fired boilers less than or equal to 5 MMBtu/hr, boilers with oxygen trim systems, seasonal boilers, and limited use boilers. [40 CFR Part 63.11223(b)(1)]
 - 2. Inspect the flame pattern, <u>as applicable</u>, and adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications. [40 CFR Part 63.11223(b)(2)]
 - 3. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure it is correctly calibrated and functioning properly. Delay of the inspection until the next scheduled shutdown is permitted; not to exceed 36 months from the previous inspection for boilers greater than 5 MMBtu/hr or 72 months from the previous inspection for oil fired boilers less than or equal to 5 MMBtu/hr, boilers with oxygen trim systems, seasonal boilers, and limited use boilers. [40 CFR Part 63.11223(b)(3)]
 - 4. Optimize total emissions of CO, consistent with manufacturer's specifications. [40 CFR Part 63.11223(b)(4)]
 - 5. Measure the concentration in the effluent stream of CO in parts per million by volume (ppmv), and oxygen in volume percent, before and after adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. [40 CFR Part 63.11223(b)(5)]

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- 6. If a unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of start-up. [40 CFR Part 63.11223(b)(7)]
- (iv) <u>Tune-Up Report</u>: A tune-up report shall be maintained onsite and, if requested, submitted to EPA. The report shall contain the following information:
 - 1. The concentration of CO in the effluent stream (ppmv) and oxygen (volume percent) measured at high fire or typical operating load both **before** and **after** the boiler tune-up;
 - 2. A description of any corrective actions taken as part of the tune-up of the boiler; and
 - 3. The types and amounts of fuels used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit. [40 CFR §63.11223(b)(6)]
- (v) After conducting the initial boiler tune-up, a Notification of Compliance Status should have been submitted to EPA no later than July 19, 2014. [40 CFR Part 63.11225(a)(4) and 40 CFR Part 63.11214(b)]

(3) Compliance Report:

A compliance report shall be prepared by March 1st biennially which covers the previous two calendar years. The report shall be maintained by the source and submitted to the Department and to the EPA upon request. The report must include the items contained in §63.11225(b)(1) and (2), including the following: [40 CFR §63.11225(b)]

- (i) Company name and address;
- (ii) A statement of whether the source has complied with all the relevant requirements of this Subpart;
- (iii)A statement certifying truth, accuracy, and completeness of the notification and signed by a responsible official and containing the official's name, title, phone number, email address, and signature;
- (iv) The following certifications, as applicable:
 - 1. "This facility complies with the requirements in 40 CFR §63.11223 to conduct tune-ups of each boiler in accordance with the frequency specified in this Subpart."
 - 2. "No secondary materials that are solid waste were combusted in any affected unit."

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3. "This facility complies with the requirement in 40 CFR §§63.11214(d) to conduct a tune-up of each applicable boiler according to 40 CFR §63.11223(b)."

(4) Energy Assessment

Boiler #2 is subject to the energy assessment requirement as follows:

- (i) A one-time energy assessment was required to be performed by a qualified energy assessor on the applicable boilers no later than March 21, 2014. [40 CFR Part 63.11196(a)(3)]
- (ii) The energy assessment was required to include a visual inspection of the boiler system; an evaluation of operating characteristics of the affected boiler systems, specifications of energy use systems, operating and maintenance procedures, and unusual operating constraints; an inventory of major energy use systems consuming energy from affected boiler(s) and which are under control of the boiler owner or operator; a review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage; a list of major energy conservation measures that are within the facility's control; a list of the energy savings potential of the energy conservation measures identified; and a comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.

[40 CFR Part 63, Table 2(4)]

(iii)A Notification of Compliance Status was required to be submitted to EPA no later than July 19, 2014. [40 CFR Part 63.11225(a)(4) and 40 CFR Part 63.11214(c)]

b. Recordkeeping

Records shall be maintained consistent with the requirements of 40 CFR Part 63, Subpart JJJJJJ including the following [40 CFR Part 63.11225(c)]:

- (1) Copies of notifications and reports with supporting compliance documentation;
- (2) Identification of each boiler, the date of tune-up, procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned;
- (3) Records of the occurrence and duration of each malfunction of each applicable boiler; and
- (4) Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler.

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Records shall be in a form suitable and readily available for expeditious review. EPA requires submission of Notification of Compliance Status reports for tuneups and energy assessments through their electronic reporting system (see http://www3.epa.gov/ttn/chief/ert/ for more information on EPA's electronic reporting system). [63.1125(a)(4)(vi)]

C. Annual Emissions

1. Total Annual Emissions

WCC shall be restricted to the following annual emissions, based on a calendar year total. The tons per year limits were calculated based on 16,800 MMBtu/year of heat input for Boilers #1 and #2 combined:

Total Licensed Annual Emissions for the Facility Tons/year

(used to calculate the annual license fee)

	PM	PM ₁₀	SO ₂	NO _x	CO	VOC
Boilers #1 and #2	0.7	0.7	4.2	1.2	0.9	0.1
Total TPY	0.7	0.7	4.2	1.2	0.9	0.1

2. Greenhouse Gases

Greenhouse gases are considered regulated pollutants as of January 2, 2011, through 'Tailoring' revisions made to EPA's Approval and Promulgation of Implementation Plans, 40 CFR Part 52, Subpart A, §52.21, Prevention of Significant Deterioration of Air Quality rule. Greenhouse gases, as defined in 06-096 CMR 100 (as amended), are the aggregate group of the following gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. For licensing purposes, greenhouse gases (GHG) are calculated and reported as carbon dioxide equivalents (CO₂e).

The quantity of CO_2e emissions from this facility is less than 100,000 tons per year, based on the following:

- the facility's fuel use limit;
- worst case emission factors from the following sources: U.S. EPA's AP-42, the Intergovernmental Panel on Climate Change (IPCC), and 40 CFR Part 98, *Mandatory Greenhouse Gas Reporting*; and
- global warming potentials contained in 40 CFR Part 98.

No additional licensing actions to address GHG emissions are required at this time.

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III. AMBIENT AIR QUALITY ANALYSIS

The level of ambient air quality impact modeling required for a minor source shall be determined by the Department on a case-by case basis. In accordance with 06-096 CMR 115, an ambient air quality impact analysis is not required for a minor source if the total licensed annual emissions of any pollutant released do not exceed the following levels and there are no extenuating circumstances:

<u>Pollutant</u>	Tons/Year
PM_{10}	25
SO_2	50
NO _x	50
CO	250

The total licensed annual emissions for the facility are below the emission levels contained in the table above and there are no extenuating circumstances; therefore, an ambient air quality impact analysis is not required as part of this license.

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards, and
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-158-71-F-N/A subject to the following conditions.

<u>Severability</u>. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

STANDARD CONDITIONS

(1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (38 M.R.S.A. §347-C).

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- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 115.

 [06-096 CMR 115]
- (3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [06-096 CMR 115]
- (4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [06-096 CMR 115]
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. §353-A. [06-096 CMR 115]
- (6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 CMR 115]
- (7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 CMR 115]
- (8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [06-096 CMR 115]
- (9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license.

 [06-096 CMR 115]
- (10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license. [06-096 CMR 115]

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- (11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:
 - A. perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
 - 1. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
 - 2. pursuant to any other requirement of this license to perform stack testing.
 - B. install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
 - C. submit a written report to the Department within thirty (30) days from date of test completion.

[06-096 CMR 115]

- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:
 - A. within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and
 - B. the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and
 - C. the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

[06-096 CMR 115]

(13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [06-096 CMR 115]

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- (14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emissions and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation. [06-096 CMR 115]
- (15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status.

 [06-096 CMR 115]

SPECIFIC CONDITIONS

(16) **Boilers #1 and #2**

A. Fuel Use

- 1. Total fuel use for Boilers #1 and #2 combined shall not exceed a heat input of 16,800 MMBtu based on a calendar year total, [06-096 CMR 115, BACT]
- 2. Boiler #1 is licensed to fire natural gas and distillate fuel. Boiler #2 is licensed to fire distillate fuel. [06-096 CMR 115, BACT]
- 3. Prior to July 1, 2018, WCC shall fire distillate fuel with a maximum sulfur content not to exceed 0.35% by weight. [06-096 CMR 115, BACT]
- 4. Beginning July 1, 2018, WCC shall not purchase of otherwise obtain distillate fuel with a maximum sulfur content that exceeds 0.0015% by weight (15 ppm) for use in Boilers #1 and #2. [06-096 CMR 115, BACT]
- 5. Compliance shall be demonstrated by fuel records from the supplier showing the quantity, type, and the percent sulfur of the fuel delivered, if applicable. Records of annual fuel use shall be kept and converted to MMBtu on a monthly and calendar year total basis using heating values of 0.00103 MMBtu/scf for natural gas and 0.14 MMBtu/gal for distillate fuel. [06-096 CMR 115, BACT]

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B. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Boiler #1	PM	0.05	06-096 CMR 115, BACT
(natural gas)	1 171	0.03	00-090 CIVIK 113, BAC1
Boiler #1	PM	0.08	06-096 CMR 115, BACT
(distillate fuel)	L IAI	0.08	00-090 CIVIK 113, BAC1
Boiler #2	PM	0.08	06-096 CMR 115, BACT
(distillate fuel)	L IVI	0.08	00-090 CIVIK 113, BAC1

C. Emissions shall not exceed the following [06-096 CMR 115, BACT]:

	PM	PM ₁₀	SO ₂	NO _x	CO	VOC
Emission Unit	<u>(lb/hr)</u>	<u>(lb/hr)</u>	<u>(lb/hr)</u>	<u>(lb/hr)</u>	<u>(lb/hr)</u>	<u>(lb/hr)</u>
Boiler #1 (natural gas)	0.53	0.53	0.01	1.02	0.86	0.06
Boiler #1 (distillate fuel)	0.84	0.84	5.29	1.50	0.38	0.02
Boiler #2 (distillate fuel)	0.84	0.84	5.29	1.50	0.38	0.02

- D. Visible emissions from Boilers #1 and #2 shall not exceed 10% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a continuous 3-hour period. [06-096 CMR 115, BACT]
- E. Boiler MACT (40 CFR Part 63, Subpart JJJJJJ) Requirements for Boiler #2 [incorporated under 06-096 CMR 115, BACT]
 - 1. The facility shall implement a boiler tune-up program. [40 CFR Part 63.11223]
 - a. Each tune-up shall be conducted at a frequency specified by the rule and based on the size, age, and operations of the boiler. See chart below:

Boiler Category	Tune-Up Frequency
New or Existing Oil, Biomass and Coal fired boilers that are not designated as "Boilers with	
less frequent tune up requirements" listed below	Every 2 years

[40 CFR Part 63.11223(a) and Table 2]

b. The boiler tune-up program, conducted to demonstrate continuous compliance, shall be performed as specified below:

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- (1) As applicable, inspect the burner, and clean or replace any component of the burner as necessary. Delay of the burner inspection until the next scheduled shutdown is permitted; not to exceed 36 months from the previous inspection for boilers greater than 5 MMBtu/hr or 72 months from the previous inspection for oil fired boilers less than or equal to 5 MMBtu/hr, boilers with oxygen trim systems, seasonal boilers, and limited use boilers. [40 CFR Part 63.11223(b)(1)]
- (2) Inspect the flame pattern, <u>as applicable</u>, and adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications. [40 CFR Part 63.11223(b)(2)]
- (3) Inspect the system controlling the air-to-fuel ratio, <u>as applicable</u>, and ensure it is correctly calibrated and functioning properly. Delay of the inspection until the next scheduled shutdown is permitted; not to exceed 36 months from the previous inspection for boilers greater than 5 MMBtu/hr or 72 months from the previous inspection for oil fired boilers less than or equal to 5 MMBtu/hr, boilers with oxygen trim systems, seasonal boilers, and limited use boilers. [40 CFR Part 63.11223(b)(3)]
- (4) Optimize total emissions of CO, consistent with manufacturer's specifications. [40 CFR Part 63.11223(b)(4)]
- (5) Measure the concentration in the effluent stream of CO in parts per million by volume (ppmv), and oxygen in volume percent, before and after adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. [40 CFR Part 63.11223(b)(5)]
- (6) If a unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of start-up. [40 CFR Part 63.11223(b)(7)]
- c. <u>Tune-Up Report</u>: A tune-up report shall be maintained onsite and, if requested, submitted to EPA. The report shall contain the following information:
 - (1) The concentration of CO in the effluent stream (ppmv) and oxygen (volume percent) measured at high fire or typical operating load both **before** and **after** the boiler tune-up;
 - (2) A description of any corrective actions taken as part of the tune-up of the boiler; and
 - (3) The types and amounts of fuels used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit. [40 CFR §63.11223(b)(6)]

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2. Compliance Report

A compliance report shall be prepared by March 1st biennially which covers the previous two calendar years. The report shall be maintained by the source and submitted to the Department and to the EPA upon request. The report must include the items contained in §63.11225(b)(1) and (2), including the following: [40 CFR §63.11225(b)]

- a. Company name and address;
- b. A statement of whether the source has complied with all the relevant requirements of this Subpart;
- c. A statement certifying truth, accuracy, and completeness of the notification and signed by a responsible official and containing the official's name, title, phone number, email address, and signature;
- d. The following certifications, as applicable:
 - (1) "This facility complies with the requirements in 40 CFR §63.11223 to conduct tune-ups of each boiler in accordance with the frequency specified in this Subpart."
 - (2) "No secondary materials that are solid waste were combusted in any affected unit."
 - (3) "This facility complies with the requirement in 40 CFR §§63.11214(d) to conduct a tune-up of each applicable boiler according to 40 CFR §63.11223(b)."
- 3. Records shall be maintained consistent with the requirements of 40 CFR Part 63, Subpart JJJJJJ including the following [40 CFR Part 63.11225(c)]:
 - a. Copies of notifications and reports with supporting compliance documentation;
 - b. Identification of each boiler, the date of tune-up, procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned;
 - c. Records of the occurrence and duration of each malfunction of each applicable boiler; and
 - d. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler.

Records shall be in a form suitable and readily available for expeditious review. EPA requires submission of Notification of Compliance Status reports for tuneups and energy assessments through their electronic reporting system (see http://www3.epa.gov/ttn/chief/ert/ for more information on EPA's electronic reporting system). [63.1125(a)(4)(vi)]

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(17) WCC shall notify the Department within 48 hours and submit a report to the Department on a <u>quarterly basis</u> if a malfunction or breakdown in any component causes a violation of any emission standard (38 M.R.S.A. §605).

DONE AND DATED IN AUGUSTA, MAINE THIS	//	DAY OF	December	, 2015.
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DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Marc Wen Lover Cone for AVERY T. DAY, ACTING COMMISSIONER

The term of this license shall be ten (10) years from the signature date above.

[Note: If a complete renewal application, as determined by the Department, is submitted prior to expiration of this license, then pursuant to Title 5 M.R.S.A. §10002, all terms and conditions of the license shall remain in effect until the Department takes final action on the renewal of the license.]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: <u>September 25, 2015</u>
Date of application acceptance: <u>September 28, 2015</u>

Date filed with the Board of Environmental Protection:

This Order prepared by Jonathan E. Rice, Bureau of Air Quality.

